GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:1738
ANSWERED ON:09.12.2015
Radiation Levels
Singh Shri Pashupati Nath;Yadav Shri Laxmi Narayan

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the ultraviolet radiation levels were on an alarming increase in Delhi during 15th May to 30th May this year;

(b) if so, the details of the Ultraviolet Index (UV) figures in this regard and the effects of UV radiation on human health;

(c) whether the Government has conducted any survey in this regard and if so, the details thereof; and

(d) the measures taken/being taken by the Government to reduce its effects?

Answer

The MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a-b) The radiation level does not reflect alarming values this year during 15th May to 30th May as UV index usually reach at these levels during peak summer. The UV index recorded at Delhi was in Medium to High Risk during this period. The UV index levels ranged between 0 to 8 as per observational data of Earth System Science Organisation-India Meteorological Department (ESSO-IMD).

The UV flux were within the normal variation range for entire day during this period, when compared with the last six years of data. The average peak value of UV flux during May 15-31, 2015 was 39 watt per sq meter which was actually less than the average peak value in this period during the last six years (2010-2015) which was about 43 watt per sq meter. The UV Index for this period is given in Annexure-1.

UV radiation exposure categories defined by ESSO −Indian Institute of Tropical Meteorology (IITM) is given below.
UV index range Risk Level Health Advisory
1-4 No Risk No health risk to General public
3 to 5 Low Risk Little risk of harm from unprotected sun exposure. It is advisable to use UV-protective accessories for sensitive people, general public less likely to be affected.
6 to 9 Medium Risk Sensitive people are at medium risk of harm from direct exposure to sun. It is advisable to use UV-protective accessories by general public as well.
>10 High Risk All people are at high risk of harm. It is advisable to avoid direct sun exposure.
(c) ESSO - IMD is monitoring UV index at Lodhi road, New Delhi regularly.

(d) The advisory for Medium Risk is "Sensitive people are at risk of harm from direct exposure to sun. It is advisable to use UV-protective accessories by general public as well", whereas advisory for health effect for High Risk is "all people are at risk". It is advisable to avoid direct exposure to the sun." Prolonged human exposure to solar UV radiation may result in acute and chronic health effects on the skin, eye and other immune systems.